

ABSTRACT OF THE DISCLOSURE**Polymer-Clay Nanocomposite for Extended Release of Active Ingredient**

An extended release dosage form and an extended release polymeric dispenser containing polymer-clay nanocomposite are provided. The polymer-clay nanocomposite contains exfoliated clay platelets dispersed in a polymer matrix. The extended release dosage form contains active ingredient in the polymer-clay nanocomposite. The extended release polymeric dispenser contains a reservoir of an active ingredient partially or completely encapsulated by a polymer-clay nanocomposite layer. Also provided are a method of providing release of an active ingredient from the extended release dosage form and a method or providing release of an active ingredient from the extended release polymeric dispenser. The extended release dosage form and the extended release polymeric dispenser are useful for the application of pharmaceutical compounds, agricultural compounds, and perfumes.